#### WHAT IS CLAIMED IS:

#### 1. A compound of the formula I:

I

wherein:

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B is a bicycloheterocycle selected from the group consisting of:

where T, U, V, W, X and Y are each independently a carbon atom or a nitrogen atom wherein no more than two of T, U, V and W, and no more than three of T, U, V, W, X and Y, are a nitrogen atom,

where B is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R1, R2, R3a and R3b, wherein

 $R^1$ ,  $R^2$ ,  $R^{3a}$  and  $R^{3b}$  are independently selected from:

- -C1-6alkyl, which is unsubstituted or substituted with 1-7 substituents where the substituents are independently selected from:
  - (a) halo,
  - (b) hydroxy,
  - (c) -O-C<sub>1-6</sub>alkyl,
  - (d) -C3-6cycloalkyl,

phenyl or heterocycle, wherein heterocycle is selected from: pyridyl, (e) pyrimidinyl, pyrazinyl, pyridazinyl, piperidinyl, piperazinyl, pyrrolidinyl, thienyl, or morpholinyl.

which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:

- (i) -C<sub>1-6</sub>alkyl,
- (ii) -O-C<sub>1-6</sub>alkyl,
- (iii) halo,
- (iv) hydroxy,
- (v) trifluoromethyl, and
- (vi) -OCF<sub>3</sub>,
- -CO<sub>2</sub>R<sup>9</sup>, wherein R<sup>9</sup> is independently selected from: (f)
  - (i) hydrogen,
  - -C<sub>1</sub>-6alkyl, which is unsubstituted or substituted with 1-6 fluoro, (ii)
  - (iii) -C3-6cycloalkyl,
  - (iv) benzyl, and
  - (v) phenyl,
- -NR10R11, wherein R10 and R11 are independently selected from: (g)
  - (i) hydrogen,
  - -C1-6alkyl, which is unsubstituted or substituted with 1-6 fluoro, (ii)
  - (iii) -C5-6cycloalkyl.
  - (iv) benzyl,
  - (v) phenyl,
  - -COR9, and (vi)

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(vii) -SO<sub>2</sub>R<sub>12</sub>, -SO<sub>2</sub>R<sup>12</sup>, wherein  $R^{12}$  is independently selected from: (h) -C1-6alkyl, which is unsubstituted or substituted with 1-6 fluoro, (i) (ii) -C5-6cycloalkyl, 5 (iii) benzyl, and (iv) phenyl, -CONR10aR11a, wherein R10a and R11a are independently selected (i) from: (i) hydrogen, 10 -C1-6alkyl, which is unsubstituted or substituted with 1-6 fluoro, (ii) (iii) -C5-6cycloalkyl, (iv) benzyl, phenyl, (v) or where R10a and R11a may be joined together to form a ring selected 15 from azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl, which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from: **(I)** -C<sub>1-6</sub>alkyl (II)-O-C<sub>1-6</sub>alkyl 20 (III)halo (IV) hydroxy (V) phenyl, and (VI) benzyl, trifluoromethyl, (j) 25 (k)  $-OCO_2R^9$ , -(NR10a)CO2R9, (l) (m) -O(CO)NR10aR11a -(NR9)(CO)NR10aR11a, and (n) (o) -O-C3-6cycloalkyl, 30 -C3-6cycloalkyl, which is unsubstituted or substituted with 1-7 substituents where (2) the substituents are independently selected from: (a) halo, (b) hydroxy, (c) -O-C<sub>1-6</sub>alkyl,

- (d) trifluoromethyl,
- phenyl, which is unsubstituted or substituted with 1-5 substituents where (e) the substituents are independently selected from:
  - (i) -C<sub>1</sub>-6alkyl,
  - (ii) -O-C<sub>1-6</sub>alkyl,
  - (iii) halo.
  - (iv) hydroxy, and
  - (v) trifluoromethyl,
- phenyl or heterocycle, wherein heterocycle is selected from: pyridyl, pyrimidinyl, (3) pyrazinyl, thienyl, pyridazinyl, pyrrolidinyl, azetidinyl, thiazolyl, isothiazolyl, oxazolyl, isoxazolyl, imidazolyl, triazolyl, tetrazolyl, azepinyl, benzimidazolyl, benzopyranyl, benzofuryl, benzothiazolyl, benzoxazolyl, chromanyl, furyl, imidazolinyl, indolinyl, indolyl, quinolinyl, isoquinolinyl, tetrahydroquinolinyl, isoindolinyl, tetrahydroisoquinolinyl, 2-oxopiperazinyl, 2-oxopiperidinyl, 2oxopyrrolidinyl, pyrazolidinyl, pyrazolyl, pyrrolyl, quinazolinyl, tetrahydrofuryl, thiazolinyl, purinyl, naphthyridinyl, quinoxalinyl, 1,3-dioxolanyl, oxadiazolyl, piperidinyl, tetrahydropyranyl, tetrahydrothienyl, tetrahydrothiopyranyl, and morpholinyl, which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:
  - -C1-6alkyl, which is unsubstituted or substituted with 1-6 fluoro, (a)
  - (b) halo.
  - (c) hydroxy.
  - -O-C1-6alkyl, which is unsubstituted or substituted with 1-6 fluoro, (d)
  - (e) -C3-6cycloalkyl,
  - (f) phenyl or heterocycle, wherein heterocycle is selected from: pyridyl, pyrimidinyl, pyrazinyl, thienyl, or morpholinyl, which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:
    - (i) -C<sub>1-6</sub>alkyl,
    - (ii) -O-C<sub>1-6</sub>alkyl,
    - (iii) halo,
    - (iv) hydroxy, and
    - (v) trifluoromethyl,
  - (g)  $-CO_2R^9$

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(h)
                               -(CO)R^9
                               -NR10R11
                        (i)
                        (j)
                               -CONR10R11
                        (k)
                               охо
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                       (l)
                               -SR12.
                               -S(O)R12, and
                       (m)
                               -SO<sub>2</sub>R<sub>12</sub>,
                       (n)
                (4)
                       halo,
                (5)
                       oxo,
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               (6)
                       hydroxy,
                       -O-C1-6alkyl, which is unsubstituted or substituted with 1-5 halo,
               (7)
               (8)
                       -CN,
               (9)
                      -CO_2R^9
               (10)
                      -NR10R11
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               (11)
                      -SO_2R12
               (12)
                      -CONR10aR11a
               (13)
                      -OCO_2R^9,
               (14)
                      -(NR10a)CO2R9
              (15)
                      -O(CO)NR10aR11a
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                      -(NR<sup>9</sup>)(CO)NR10aR11a
              (16)
              (17)
                      -(CO)-(CO)NR10aR11a, and
              (18)
                      -(CO)-(CO)OR9;
              or where R^{3a} and R^{3b} and the carbon atom(s) to which they are attached may be joined
                     together to form a ring selected from cyclobutyl, cyclopentyl, cyclohexyl,
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                     cyclopentenyl, cyclohexenyl, azetidinyl, pyrrolidinyl, piperidinyl,
                     tetrahydrofuranyl, tetrahydropyranyl, furanyl, dihydrofuranyl, dihydropyranyl,
                     thienyl, dihydrothienyl, tetrahydrothienyl, dihydrothiopyranyl,
                     tetrahydrothiopyranyl or piperazinyl, which is unsubstituted or substituted with 1-
                     5 substituents where the substituents are independently selected from:
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                            -C<sub>1</sub>-6alkyl, which is unsubstituted or substituted with 1-3 substituents
                     (a)
                            where the substituents are independently selected from:
                            (i)
                                    halo,
                            (ii)
                                    hydroxy,
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(iii)

-O-C<sub>1-6</sub>alkyl,

(iv) -C3-6cycloalkyl, phenyl or heterocycle, wherein heterocycle is selected from: (v) pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, piperidinyl, piperazinyl, pyrrolidinyl, thienyl, or morpholinyl, which is 5 unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from: **(I)** -C<sub>1-6</sub>alkyl, (II)-O-C<sub>1-6</sub>alkyl, (III)halo, 10 (IV) hydroxy, (V) trifluoromethyl, and (VI) -OCF<sub>3</sub>, -CO<sub>2</sub>R<sup>9</sup>, (vi) (vii) -NR10R11 15 (viii) -SO<sub>2</sub>R<sub>12</sub>, -CONR10aR11a, and (ix) -(NR10a)CO2R9, (x) phenyl or heterocycle, wherein heterocycle is selected from: pyridyl, (b) pyrimidinyl, pyrazinyl, thienyl, pyridazinyl, pyrrolidinyl, azetidinyl, 20 piperidinyl and morpholinyl, which is unsubstituted or substituted with 1-3 substituents where the substituents are independently selected from: -C1-6alkyl, which is unsubstituted or substituted with 1-6 fluoro, (i) (ii) halo, (iii) hydroxy, 25 -O-C1-6alkyl, which is unsubstituted or substituted with 1-6 (iv) fluoro, and (v) -C3-6cycloalkyl, (c) halo, (d) -SO<sub>2</sub>R<sup>12</sup>, 30 (e) hydroxy, -O-C1-6alkyl, which is unsubstituted or substituted with 1-5 halo, (f) (g) -CN, -COR 12. (h) -NR10R11, (i)

(j) -CONR10aR11a (k)  $-CO_2R^9$ **(l)** -(NR10a)CO2R9, -O(CO)NR10aR11a (m) 5 -(NR9)(CO)NR10aR11a, and (n) (o) oxo;  $A^1$  and  $A^2$  are independently selected from: (1) a bond, -CR $^{13}$ R $^{14}$ -, wherein R $^{13}$  and R $^{14}$  are independently selected from: 10 (2) C<sub>1-6</sub> alkyl, which is unsubstituted or substituted with 1-6 fluoro, and (b) (c) hydroxy, or wherein one of A<sup>1</sup> and A<sup>2</sup> is absent; 15 R<sup>4</sup> is selected from: (1) hydrogen, C<sub>1-6</sub> alkyl, which is unsubstituted or substituted with 1-6 fluoro, (2) (3) C<sub>5-6</sub> cycloalkyl, 20 (4) benzyl, and (5) phenyl;  $R^{5a}$ ,  $R^{5b}$  and  $R^{5c}$  are independently selected from: (1) hydrogen, 25 (2) C<sub>1-6</sub> alkyl, -O-C<sub>1-6</sub>alkyl, (3) (4) -OCF<sub>3</sub>, (5) trifluoromethyl. (6) halo, 30 hydroxy, and **(7)** (8) -CN;

R<sup>6</sup> is selected from:

(1) hydrogen,

	(2)	-C <sub>1</sub>	alkyl or -C3-6cycloalkyl which are unsubstituted or substituted	with 1.7		
5		sub	substituents where the substituents are independently selected from:			
		(a)	halo,			
		(b)	hydroxy,			
	;	(c)	-O-C <sub>1-6</sub> alkyl,			
		(d)	-C3-6cycloalkyl,			
10		(e)	phenyl, which is unsubstituted or substituted with 1-5 substituted the substituents and in the substituted with 1-5 substituted with 1-	omto suls s		
			the substituents are independently selected from:	ents where		
			(i) -C <sub>1-6</sub> alkyl,			
			(ii) -O-C <sub>1-6</sub> alkyl,			
			(iii) halo,			
			(iv) hydroxy, and			
15			(v) trifluoromethyl,			
		(f)	-CO <sub>2</sub> R <sup>9</sup> ,			
		(g)	-NR <sup>10</sup> R <sup>11</sup> ,			
		(h)	-CONR <sup>10</sup> R <sup>11</sup> ,			
		(i)	-SO <sub>2</sub> R12, and			
		(j)	trifluoromethyl			
20	(3)	pheny	phenyl or heterocycle, wherein heterocycle is selected from: pyridyl, pyrimidinyl,			
		pyrazmyr, uncryr, or morpholinyl, which is unsubstituted or substituted with 1.5				
		540561	substituents where the substituents are independently selected from:			
		(4)	CI-baikyi,			
		(b)	O-C <sub>1-6</sub> alkyl,			
25		(c)	alo,			
23		(d)	ydroxy, and			
		(e)	rifluoromethyl;			
30	m is 1 or 2;					
	n is 1 or 2;					
	and pharmaceutically acceptable salts thereof and individual enantiomers and diastereomers thereof.					
	thereof.	y	salts thereof and individual enantiomers and diastereo	mers		

2. The compound of Claim 1 of the formula:

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and pharmaceutically acceptable salts thereof and individual enantiomers and diastereomers thereof.

3. The compound of Claim 1 of the formula:

and pharmaceutically acceptable salts thereof and individual enantiomers and diastereomers thereof.

4. The compound of Claim 1 of the formula:

$$\begin{array}{c|c}
 & O \\
 & N \\$$

and pharmaceutically acceptable salts thereof and individual enantiomers and diastereomers thereof.

5. The compound of Claim 1 of the formula:

and pharmaceutically acceptable salts thereof and individual enantiomers and diastereomers thereof.

6. The compound of Claim 1 of the formula:

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and pharmaceutically acceptable salts thereof and individual enantiomers and diastereomers thereof.

7. The compound of Claim 1, wherein B is selected from:

unsubstituted or substituted with 1-5 substituents selected from  $R^1$ ,  $R^2$ ,  $R^{3a}$  and  $R^{3b}$ ,

and pharmaceutically acceptable salts thereof and individual enantiomers and diastereomers thereof.

- 8. The compound of Claim 1, wherein B is selected from benzimidazolyl, 2-oxobenzoxazolinyl, 2-oxobenzimidazolinyl, indolyl, 2-oxobenzothiazolinyl, 1,3-dihydro-2*H*-imidazo[4,5-*b*]pyridine-2-one, naphtho[2,1-*d*][1,3]oxazolin-2(3*H*)-one and naphtho[1,2-*d*][1,3]oxazolin-2(1*H*)-one.
- 9. The compound of Claim 1, wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3a</sup> and R<sup>3b</sup> are independently selected from:
  - (1) -C<sub>1</sub>-6alkyl, which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:
    - (a) fluoro,

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- (b) phenyl or heterocycle, wherein heterocycle is selected from: pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, piperidinyl, piperazinyl, pyrrolidinyl, thienyl, or morpholinyl,
- (c) -CO<sub>2</sub>R<sup>9</sup>, wherein R<sup>9</sup> is independently selected from:
  - (i) hydrogen, and
  - (ii) -C<sub>1-6</sub>alkyl,
- (d) -CONR<sup>10</sup>aR<sup>11</sup>a, wherein R<sup>10</sup>a and R<sup>11</sup>a are independently selected from:
  - (i) hydrogen, and
  - (ii) -C<sub>1</sub>-6alkyl,

or where  $R^{10a}$  and  $R^{11a}$  may be joined together to form a ring selected from azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, and morpholinyl, and

- (e) -O-C<sub>3-6</sub>cycloalkyl,
- phenyl or heterocycle, wherein heterocycle is selected from: pyridyl, pyrimidinyl, pyrazinyl, thienyl, pyridazinyl, pyrrolidinyl, thiazolyl, isothiazolyl, 2-oxopyrrolidinyl, tetrahydrofuryl, piperidinyl, tetrahydrothienyl, or tetrahydrothiopyranyl, which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:
  - (a) -C<sub>1</sub>-6alkyl, which is unsubstituted or substituted with 1-3 fluoro
  - (b) halo,

-CO<sub>2</sub>R<sup>9</sup>, wherein R<sup>9</sup> is selected from: (c) (i) hydrogen, (ii) -C<sub>1-4</sub>alkyl, and (iii) -C3-6cycloalkyl, 5  $-(CO)R^9$ (d) -CONR 10aR 11a, wherein R 10a and R 11a are independently selected (e) from: (i) hydrogen, and (ii) -C<sub>1-6</sub>alkyl, 10 or where  $R^{10a}$  and  $R^{11a}$  may be joined together to form a ring selected from azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, and morpholinyl, -O-C<sub>1</sub>-6alkyl, which is unsubstituted or substituted with 1-3 fluoro, (f) (g) hydroxy, (h) oxo, 15 (i) -S-C<sub>1-4</sub>alkyl, (j) -S(O)-C<sub>1-4</sub>alkyl, and (k) -SO<sub>2</sub>-C<sub>1-4</sub>alkyl, (3) halo, (4) hydroxy, 20 -O-C1-6alkyl, which is unsubstituted or substituted with 1-3 fluoro, (5) (6) -NH<sub>2</sub>, (7) -C3-6cycloalkyl, -(CO)-(CO)NR10aR11a, wherein R10a and R11a are independently selected (8) from: 25 (a) hydrogen, and -C<sub>1</sub>-6alkyl, and (b) (9) -CN. The compound of Claim 1, wherein R<sup>1</sup> and R<sup>2</sup> are independently selected 10. 30 from: -C1\_4alkyl, which is unsubstituted or substituted with 1-5 substituents where the (1) substituents are independently selected from: (a) fluoro, (b) phenyl,

-CO<sub>2</sub>R<sup>9</sup>, wherein R<sup>9</sup> is independently selected from: (c) (i) hydrogen, and (ii) -C<sub>1-4</sub>alkyl, -CONR10aR11a, wherein R10a and R11a are independently selected (d) 5 from: (i) hydrogen, and (ii) -C<sub>1-4</sub>alkyl, or where R10a and R11a may be joined together to form a ring selected from azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, and morpholinyl, 10 and (e) -O-C3-6cycloalkyl, phenyl or heterocycle, wherein heterocycle is selected from: pyridyl, pyrimidinyl, (2) pyrazinyl, thienyl, pyridazinyl, pyrrolidinyl, thiazolyl, tetrahydrofuryl, piperidinyl, or tetrahydrothienyl, which is unsubstituted or substituted with 1-5 substituents 15 where the substituents are independently selected from: -C<sub>1</sub>-4alkyl, which is unsubstituted or substituted with 1-3 fluoro (a) (b) halo. -CO<sub>2</sub>R<sup>9</sup>, wherein R<sup>9</sup> is selected from: (c) (i) hydrogen, 20 (ii) -C<sub>1-4</sub>alkyl, and (iii) -C3-6cycloalkyl, (d) -(CO)R<sup>9</sup>. -CONR 10aR 11a, wherein R 10a and R 11a are independently selected (e) from: 25 (i) hydrogen, and (ii) -C<sub>1-4</sub>alkyl, -O-C1-4alkyl, which is unsubstituted or substituted with 1-3 fluoro, (f) (g) hydroxy, (h) oxo 30 (i) -S-C<sub>1-4</sub>alkyl, (j) -S(O)-C<sub>1-4</sub>alkyl, and -SO<sub>2</sub>-C<sub>1-4</sub>alkyl, (k) (3) halo, (4) hydroxy,

(5) -O-C<sub>1</sub>-4alkyl, which is unsubstituted or substituted with 1-3 fluoro,

- (6)  $-NH_2$ ,
- (7) -C<sub>3-6</sub>cycloalkyl,
- (8) -(CO)-(CO)NR10aR11a, wherein R10a and R11a are independently selected from:
  - (a) hydrogen, and
  - (b) -C<sub>1</sub>-4alkyl, and
- (9) -CN.

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11. The compound of Claim 1, wherein R<sup>3a</sup> and R<sup>3b</sup> and the carbon atom(s) to which they are attached are joined together to form a ring selected from piperidinyl, cyclohexenyl, cyclohexyl and pyrrolidinyl, which is unsubstituted or substituted with 1-3 substituents independently selected from:

(a) -C<sub>1-6</sub>alkyl, which is unsubstituted or substituted with 1-3 substituents independently selected from:

- (i) halo, and
- (ii) phenyl,
- (b) phenyl or heterocycle, wherein heterocycle is selected from: pyridyl, pyrimidinyl and pyrazinyl,
- (c) -CO<sub>2</sub>R<sup>9</sup>, wherein R<sup>9</sup> is selected from:
  - (i) hydrogen, and
- (ii) -C<sub>1-4</sub>alkyl.
- 12. The compound of Claim 1, wherein R<sup>3a</sup> and R<sup>3b</sup> and the carbon atom(s) to which they are attached are joined together to form a piperidine ring, which is unsubstituted or substituted with 1-3 substituents where the substituents are independently selected from:
  - (a) -C<sub>1-6</sub>alkyl, which is unsubstituted or substituted with 1-3 substituents where the substituents are independently selected from:
    - (i) fluoro, and
    - (ii) phenyl,
  - (b) -CO<sub>2</sub>-C<sub>1-4</sub>alkyl.
  - 13. The compound of Claim 1, wherein R<sup>4</sup> is selected from: hydrogen and -C<sub>1-6</sub>alkyl, which is unsubstituted or substituted with fluoro.

14. The compound of Claim 1, wherein  $R^{5a}$ ,  $R^{5b}$  and  $R^{5c}$  are independently selected from hydrogen,  $C_{1-6}$ alkyl and halo.

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- 15. The compound of Claim 1, wherein R<sup>6</sup> is selected from:
- (1) hydrogen,
- (2) -C<sub>1-4</sub>alkyl which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:
  - (a) halo,

(b) hydroxy,

- (c) -C<sub>3</sub>-6cycloalkyl, and
- (d) phenyl, and
- (3) phenyl or heterocycle, wherein heterocycle is selected from: pyridyl, pyrimidinyl, or pyrazinyl.

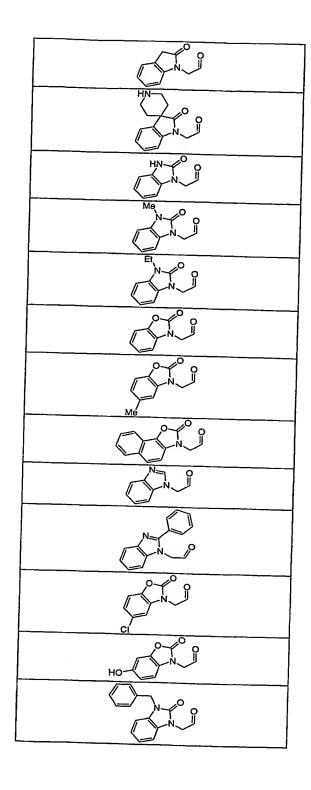
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16. A compound of the formula:

wherein Rb is selected from:

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and pharmaceutically acceptable salts thereof and individual enantiomers and diastereomers thereof.

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### 17. A compound of the formula:

wherein Rb is selected from:

and pharmaceutically acceptable salts thereof and individual enantiomers and diastereomers thereof.

### 18. A compound of the formula:

wherein Rb is selected from:

R <sup>b</sup>
F. O
N. N
Me, HN O
Me HN O
Mé O
0-4° 0
CI
N= 0
0 0
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
MeO
Me N
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HO
0
HN-KO O
HN J

and pharmaceutically acceptable salts thereof and individual enantiomers and diastereomers thereof.

# 19. The compound of the formula:

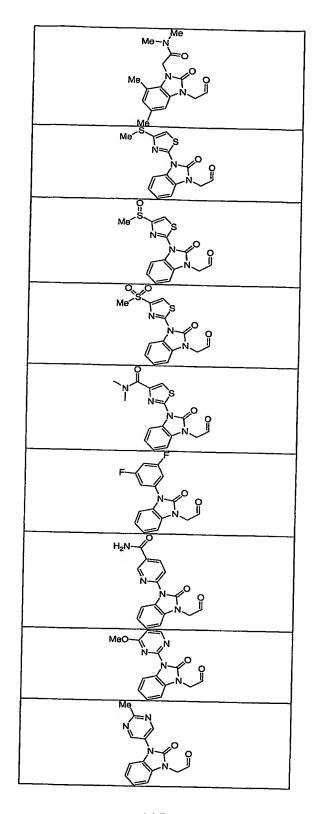
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and pharmaceutically acceptable salts thereof and individual enantiomers and diastereomers thereof.

### 20. A compound of the formula:

wherein Rb is selected from:

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and pharmaceutically acceptable salts thereof and individual enantiomers and diastereomers thereof.

## 21. A compound selected from:

and pharmaceutically acceptable salts thereof and individual enantiomers and diastereomers thereof.

22. A pharmaceutical composition which comprises an inert carrier and the compound of Claim 1.

23. The use of the compound of Claim 1 for the preparation of a medicament useful in the treatment of headache, migraine or cluster headache.